



I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 5/12/04 Signature: Joanne Ryan
(Joanne Ryan)

Docket No.: YU-P07-002
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Reed et al.

Application No.: 10/643747

Confirmation No.: 4089

Filed: August 18, 2003

Art Unit: 2811

For: SUB-NANOSCALE ELECTRONIC
DEVICES AND PROCESSES

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

In accordance with 37 C.F.R. 1.98(d), applicants respectfully submit that no copy of any patent or publication listed on the attached form PTO/SB/08 is necessary because the citations were previously cited by or submitted to the Office in prior application no. 09/988887, filed November 19, 2001 and relied upon in this application for an earlier filing date under 35 U.S.C. 120.

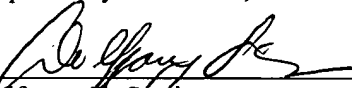
In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information

as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such. Applicants further request the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents should one or more of the documents be applied against the claims of the present application.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. YU-P07-002.

Dated: May 12, 2004

Respectfully submitted,

By 
Wolfgang E. Spatius

Registration No.: 40,256
ROPES & GRAY LLP
One International Place
Boston, Massachusetts 02110-2624
(617) 951-7000
(617) 951-7050 (Fax)
Attorneys/Agents For Applicant



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known			
		Application Number	10/643747		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	August 18, 2003		
		First Named Inventor	Mark A. Reed		
		Art Unit	2811		
		Examiner Name	Not Yet Assigned		
Sheet	1	of	3	Attorney Docket Number	YU-P07-002

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA	4,581,621	04-1986	Reed	
	AB	4,751,194	06-1988	Cibert et al.	
	AC	4,769,683	09-1988	Goronkin et al.	
	AD	4,783,427	11-1988	Reed et al.	
	AE	4,799,091	01-1989	Reed	
	AF	4,803,173	02-1989	Sill et al.	
	AG	4,835,578	05-1989	Ohtoshi et al.	
	AH	4,860,064	08-1989	Luryi	
	AI	4,894,526	01-1990	Bethea et al.	
	AJ	4,902,912	02-1990	Capasso et al.	
	AK	4,903,101	02-1990	Maserjian	
	AL	4,992,388	02-1991	Pfiester	
	AM	4,999,682	03-1991	Xu et al.	
	AN	5,006,911	04-1991	Sivan	
	AO	5,013,683	05-1991	Petroff et al.	
	AP	5,026,894	06-1991	Tour et al.	
	AQ	5,032,877	07-1991	Bate	
	AR	5,036,371	07-1991	Schwartz	
	AS	5,047,355	09-1991	Huber et al.	
	AT	5,059,695	10-1991	Tour et al.	
	AU	5,073,893	12-1991	Kondou	
	AV	5,093,699	03-1992	Weichold et al.	
	AW	5,105,232	04-1992	de Alamo et al.	
	AX	5,107,316	04-1992	Jelley et al.	
	AY	5,114,877	05-1992	Paoli et al.	
	AZ	5,126,804	06-1992	Nagai et al.	
	BA	5,130,762	07-1992	Kulick	
	BB	5,138,408	08-1992	Ando	
	BC	5,138,625	08-1992	Paoli et al.	
	BD	5,142,641	08-1992	Fujioka	
	BE	5,144,580	09-1992	Niu et al.	
	BF	5,153,687	10-1992	Ishikawa et al.	
	BG	5,160,992	11-1992	Gerard et al.	
	BH	5,170,226	12-1992	Fukuzawa et al.	
	BI	5,175,740	12-1992	Elman et al.	
	BJ	5,191,784	03-1993	Jelley et al.	
	BK	5,200,969	04-1993	Paoli	
	BL	5,202,290	04-1993	Moskovits	
	BM	5,214,664	05-1993	Paoli	

Examiner Signature		Date Considered	
-------------------------------	--	----------------------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/643747
				Filing Date	August 18, 2003
				First Named Inventor	Mark A. Reed
				Art Unit	2811
				Examiner Name	Not Yet Assigned
Sheet	2	of	3	Attorney Docket Number	YU-P07-002

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	BN	Callahan et al. The Tertiary Butyl Group as a Blocking Agent for Hydroxyl, Sulfhydryl and Amido Functions in Peptide Synthesis, p. 201-207 (10 Jan. 1963).	
	BO	Farazdel et al. Electric Field Induced Intramolecular Electron Transfer in Spiro π -Electron Systems and Their Suitability. J. Am. Chem. Soc. 112, 4206-4214 (1990).	
	BP	Hush et al. Electron and Energy Transfer Through Bridged Systems. 6. Molecular Switches: The Critical Field. J. Am. Chem. Soc. 112, 4192-4197 (1990).	
	BQ	IBM Technical Disclosure Bulletin, vol. 31, No. 9 (Feb. 1989).	
	BR	Kenny et al. Synthesis of Molecular Lines, Rigid Linear Molecules with Nanometer Scale Dimensions. J. Chem. Soc., Chem. Commun. 84-85 (1988).	
	BS	Miller. Molecular Electronics? Adv. Mater. 2, 378-379, 492-497, 601-603 (1990).	
	BT	Nishimura et al. New Method for Removing the S-p-Methoxybenzyl and S-t-Butyl Groups of Cysteine Residues with Mercuric Trifluoroacetate. Chem. Pharm. Bull. 26, 1576-1585 (1978).	
	BU	Sonogashira et al. A Convenient Synthesis of Acetylenes: Catalytic Substitutions of Acetylenic Hydrogen with Bromalkenes, Iodoarenes, and Bromopyridines. Tetrahedron Letters 4467-4470 (1975).	
	BV	Stephens. "A Synthesis of Tolanes and Heterocyclics" in The Substitution of Aryl Iodides with Cuprous Acetylides, p.3313-3315 (Dec. 1963).	
	BW	Stille. Palladium catalyzed coupling of organotin reagents with organic electrophiles. Pure & Appl. Chem. 57, 1771-1780 (1985).	
	BX	Stille. The Palladium-Catalyzed Cross-Coupling Reactions of Organotin Reagents with Organic Electrophiles. Angew. Chem. Int. Ed. Engl. 25, 508-524 (1986).	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/643747
				Filing Date	August 18, 2003
				First Named Inventor	Mark A. Reed
				Art Unit	2811
				Examiner Name	Not Yet Assigned
Sheet	3	of	3	Attorney Docket Number	YU-P07-002

	BY	Suffert et al. Towards Molecular Electronics: A New Family of Aromatic Polymine Chelates Substituted with Alkyne Groups. Tetrahedron Letters 32, 757-760 (1991).	
	BZ	Tour et al. Approaches to Orthogonally Fused Conducting Polymers for Molecular Electronics. Am. Chem. Soc. 5662-5663 (4 July 1990).	
	CA	Tour et al. Extended Orthogonally Fused Conducting Oligomers for Molecular Electronic Devices. Am. Chem. Soc. 7064-7066 (28 Aug. 1991).	
	CB	Tour et al. Synthesis and UV-Visible Properties of Soluble alpha-Thiophene Oligomers. Monomer to Octamer. Am. Chem. Soc. 1901-1907 (30 March 1992).	
	CC	Yoshimura et al. Quantum Wire and dot formation by chemical vapor deposition and molecular layer deposition of one-dimensional conjugated polymer. Am. Inst. Physics 268-270 (20 Jan. 1992).	
	CD	Zecevic et al. Spectroscopic and Electrochemical Studies of Transition Metal Tertrasulfonated Phthalocyanines. J. Electroanal. Chem. 196, 339-358 (1985).	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--